

ABSTRACT OF THE DISCLOSURE

Given a set of basis functions, a set of example inputs, and a set of uniform error bounds for the basis functions over the example inputs, a quadratic program is formed. The quadratic program is solved, producing a solution vector and a solution value. A hypothesis function is formed through fusion by using the solution vector to weight the outputs of the basis function. The hypothesis function is a function with minimum error bound among the functions formed by convex combination of basis function outputs. The solution value is an error bound for the hypothesis function. The error bound is logically implied by the uniform error bounds over the basis functions rather than uniform error bounds over the entire class of functions formed by convex combination of basis function outputs.